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CLAIMS:

1. A heat transfer element comprising a polymer matrix having a fibrous material interspersed therein, said heat transfer element comprising a fluoropolymer at least on an outer surface thereof, the interspersed material within the polymer matrix providing rigidity to the heat transfer element, and the fibrous material comprising from about 20% by volume to about 60% by volume of the heat transfer element of glass fibres distributed within the heat transfer element as thermally conductive material.
2. A heat transfer element according to claim 1, in the form of a sheet.
3. A heat transfer element according to claim 1, in the form of a tube.
4. A heat transfer element according to any one of claims 1 to 3, which further comprises metal fibres interspersed therein.
5. A heat transfer element according to claim 4, in which the metal fibres comprise iron, steel, or stainless steel fibres.
6. A heat transfer element according to any one of claims 1 to 5, in which the polymer matrix further includes particles of metal dispersed therein.
7. A heat transfer element according to any one of claims 1 to 6, in which the glass fibres comprise chemically resistant glass fibres.
8. A heat transfer element according to any one of claims 1 to 6, in which the glass fibres are mixed with fibres of a plastics material.
9. A heat transfer element according to claim 8, in which the plastics material comprises a material selected from polypropylene and fluoropolymers.
10. A heat transfer element according to any one of claims

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1 to 9, in which the glass fibres comprises continuous fibres.

11. A heat transfer element according to claim 10, in which the glass fibres comprise rovings plaited to form continuous tubes, formed into tapes, or woven into panels.

12. A heat transfer element according to claim 11, in which the rovings are precoated with a plastics material.

13. A heat transfer element according to claim 11 or claim 12, in which the glass fibres comprise a continuous tube comprising loosely commingled rovings, wherein the individual rovings extend at an angle of about 10° to about 15° to the tube axis.

14. A heat transfer element which comprises a polymer sheet having a fibrous material interspersed therein and comprising a fluoropolymer at least on an outer surface of the sheet, the interspersed fibrous material within the sheet providing rigidity to the element, and the fibrous material comprising from about 20% by volume to about 60% by volume of the heat transfer element of glass fibres

20 distributed within the heat transfer element as thermally conductive material.

15. A heat transfer element according to any one of claims 1 to 14, wherein an intermediate layer of a plastics material is provided underneath the outer fluoropolymer surface of the element.

16. A heat transfer element according to claim 15, wherein the plastics material comprises an acrylic polymer.

17. A heat transfer element according to any one of claims 1 to 16, wherein the fluoropolymer comprises PVDF.

18. A heat transfer element according to any one of claims 1 to 17, wherein the fluoropolymer is mixed with another thermoplastic polymer.

20. A heat transfer element according to claim 18, wherein

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the other thermoplastic polymer is an acrylic polymer.

21. A process for the production of a heat transfer element according to any one of claims 1 to 20 comprising providing a fibrous base portion comprising glass fibres, and forming by compression moulding or lamination over the surface of the base portion a coating comprising a fluoropolymer whereby the glass fibres comprise from about 20% by volume to about 60% by volume of the heat transfer element.

22. A process according to claim 21, wherein the fibrous base portion further includes metal fibres.

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